L3 ANSWER 1 OF 6 MEDLINE on STN

AN 2003342067 MEDLINE

DN PubMed ID: 12874831

Tl N-terminal methionine removal and methionine metabolism in Saccharomyces cerevisiae.

AU Dummitt Benjamin; Micka William S; Chang Yie-Hwa

CS Edward A. Doisy Department of Biochemistry and Molecular Biology, Saint

Louis University School of Medicine, 1402 S. Grand Blvd., St. Louis, MO 63104, USA.

SO Journal of cellular biochemistry, (2003 Aug 1) 89 (5) 964-74. Journal code: 8205768. ISSN: 0730-2312.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200311

ED Entered STN: 20030723

Last Updated on STN: 20031218

Entered Medline: 20031118

L3 ANSWER 2 OF 6 MEDLINE on STN

AN 2002285344 MEDLINE

DN PubMed ID: 11968008

TI Yeast methionine aminopeptidase type 1 is ribosome-associated and

its N-terminal zinc finger domain for normal function in vivo.

AU Vetro Joseph A; Chang Yie-Hwa

CS Edward A. Doisy Department of Biochemistry and Molecular Biology,

Louis University Health Sciences Center, St. Louis, Missouri 63104, USA. SO Journal of cellular biochemistry, (2002) 85 (4) 678-88.

Journal code: 8205768. ISSN: 0730-2312.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200210

ED Entered STN: 20020528 Last Updated on STN: 20021011 Entered Medline: 20021010

L3 ANSWER 3 OF 6 MEDLINE on STN

AN 97407794 MEDLINE

DN PubMed ID: 9264543

TI Cloning, sequence, and expression of kynureninase from Pseudomonas fluorescens.

AU Koushik S V; Sundararaju B; McGraw R A; Phillips R S

CS Department of Biochemistry and Molecular Biology, University of Georgia,

Athens 30602, USA.

SO Archives of biochemistry and biophysics, (1997 Aug 15) 344 (2) 301-8. Journal code: 0372430. ISSN: 0003-9861.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199709

ED Entered STN: 19970922 Last Updated on STN: 19970922

Entered Medline: 19970908

L3 ANSWER 4 OF 6 MEDLINE on STN

AN 97368006 MEDLINE

DN PubMed ID: 9224773

TI Baculovirus-mediated expression and purification of human FMO3:

immunochemical, and structural characterization.

AU Haining R L; Hunter A P; Sadeque A J; Philpot R M; Rettie A E

CS Department of Medicinal Chemistry, University of Washington, Seattle

98195, USA.

NC GM43511 (NIGMS)

SO Drug metabolism and disposition: biological fate of chemicals, (1997) Jul)

Journal code: 9421550. ISSN: 0090-9556.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199709

ED Entered STN: 19971013

Last Updated on STN: 19971013 Entered Medline: 19970929

#L3 ANSWER 5 OF 6 MEDLINE on STN

AN 88163485 MEDLINE

DN PubMed ID: 3327521

TI Specificity of cotranslational amino-terminal processing of proteins in yeast.

AU Huang S; Elliott R C; Liu P S; Koduri R K, Weickmann J L; Lee J H;

C; Ghosh-Dastidar P; Bradshaw R A; Bryan K M; +

CS INGENE, Inc., Santa Monica, California 90404.

SO Biochemistry, (1987 Dec 15) 26 (25) 8242-6. Journal code: 0370623. ISSN: 0006-2960.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198805

ED Entered STN: 19900308 Last Updated on STN: 19900308 Entered Medline: 19880503

✓ L3 ANSWER 6 OF 6 MEDLINE on STN

AN 86108310 MEDLINE

DN PubMed ID: 3080313

TI Sequence determinants of cytosolic N-terminal protein processing

AU Flinta C; Persson B; Jornvall H; von Heijne G

SO European journal of biochemistry / FEBS, (1986 Jan 2) 154 (1) 193-6. Journal code: 0107600. ISSN: 0014-2956.

CY GERMANY, WEST: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198602

ED Entered STN: 19900321 Last Updated on STN: 20000303 Entered Medline: 19860228

=> d 1-6 abs

L3 ANSWER 1 OF 6 MEDLINE on STN

AB Methionine aminopeptidase (MetAP) catalyzes removal of the initiator methionine from nascent polypeptides. In eukaryotes, there are two forms of MetAP, type 1 and type 2, whose combined activities are essential, but whose relative intracellular roles are unclear. Methionine metabolism is an important aspect of cellular physiology, involved in oxidative stress, methylation, and cell cycle. Due to the potential of MetAP activity to provide a methionine salvage pathway, we evaluated the relationship between methionine metabolism and MetAP activity in Saccharomyces cerevisiae. We provide the first demonstration that yeast MetAP1 plays a significant role in methionine metabolism, namely, preventing premature activation of MET genes through MetAP function in methionine salvage. Interestingly, in cells lacking MetAP1, excess methionine dramatically inhibits cell growth. Growth inhibition is

independent of the ability of methionine to repress MET genes and does

result from inhibition of synthesis of another metabolite, rather it results from product inhibition of MetAP2. Inhibition by methionine is selective for MetAP2 over MetAP1. These results provide an explanation for the previously observed dominance of MetAP1 in terms of N-terminal processing and cell growth in yeast. Additionally, differential regulation of the two isoforms may be indicative of different intracellular roles for the two enzymes.

Copyright 2003 Wiley-Liss, Inc.

L3 ANSWER 2 OF 6 MEDLINE on STN

AB Methionine aminopeptidase type 1 (MetAP1) cotranslationally removes N-terminal methionine from nascent polypeptides, when the second residue in the primary structure is small and uncharged. Eukaryotic MetAP1 has an N-terminal zinc finger domain not found in prokaryotic MetAPs. We hypothesized that the zinc finger domain mediates the association of MetAP1 with the ribosomes and have reported genetic evidence that it is important for the normal function of MetAP1 in vivo. In this study, the intracellular role of the zinc finger domain in yeast MetAP1 function was examined. Wild-type MetAP1 expressed in a yeast map1 null strain removed 100% of Nterminal methionine from a reporter protein, while zinc finger mutants removed only 31-35%. Ribosome profiles of map1 null expressing wild-type MetAP1 or one of three zinc finger mutants were compared. Wild-type MetAP1 was found to be an 80S translational complex-associated protein that primarily associates with the 60S subunit. Deletion of the zinc finger domain did not significantly alter the ribosome profile distribution of MetAP1. In contrast, single point mutations in the first or second zinc finger motif disrupted association of MetAP1 with the 60S subunit and the 80S translational complex. Together, these results indicate that the zinc finger domain is essential for the normal processing function of MetAP1 in vivo and suggest that it may be important for the proper functional alignment of MetAP1 on the ribosomes.

L3 ANSWER 3 OF 6 MEDLINE on STN

Copyright 2002 Wiley-Liss, Inc.

AB We have cloned the gene encoding kynureninase from Pseudomonas fluorescens

using a restriction site polymerase chain reaction technique (RS-PCR) (G. Sarkar, R. T. Turner, and M. E. Bolander PCR Methods Appl. 2, 318-

1993) and expressed the enzyme in Escherichia coli DH5a F'. The kynureninase gene has an open reading frame (ORF) of 1251 base pairs hat

codes for a protein of 416 amino acids with a calculated molecular weight of 45,906. The protein purified from P. fluorescens has N-terminal threonine and an observed molecular weight of 45,787 by electrospray

spectrometry, suggesting that the N-terminal methionine is removed by posttranslational processing. The complete gene was obtained by PCR and inserted into pTZ18U. The resultant plasmid was used to transform E. coli DH5alpha F', and these cells overexpressed kynureninase to about 37% of total soluble protein. The isolated recombinant protein has molecular weight and Km values identical to those of the native protein from P. fluorescens. The amino acid sequence exhibits 29% identity with those of rat and human kynureninases and 32% identity with the amino acid sequence translated from a Saccharomyces cerevisiae ORF. Alignment of the four sequences shows a highly conserved region which corresponds to the pyridoxal-5'-phosphate (PLP) binding site of rat kynureninase. Based on this alignment, we predict that Lys227 and Asp212 in P. fluorescens kynureninase are involved in pyridoxal-5'-phosphate binding. P. fluorescens kynureninase also exhibits significant homology to the nifS gene product, cysteine desulfurase, and to eucarvotic serine/pyruvate aminotransferases, suggesting that it is a member of subgroup IV of the aminotransferase family of PLP-dependent enzymes.

AB The baculovirus expression vector system was used to overexpress human

FMO3 in insect cells for catalytic, structural, and immunochemical studies. Membranes prepared from infected Trichoplusia ni cell suspensions catalyzed NADPH-dependent metabolism of methyl p-tolyl sulfide

at rates 20 times faster than those obtained with detergent-solubilized human liver microsomes. Sulfoxidation of the methyl and ethyl p-tolyl sulfides by recombinant human FMO3 proceeded with little stereochemical preference, whereas sulfoxidation of the n-propyl and n-butyl homologs demonstrated increasing selectivity for formation of the (R)-sulfoxide. This chiral fingerprint recapitulated the metabolite profile obtained when detergent-treated human liver microsomes served as the enzyme source. Catalytically active human FMO3 was purified to apparent homogeneity

cholate solubilization and sequential column chromatography on Octyl-Sepharose, DEAE-Sepharose, and hydroxyapatite. Purified FMO3 exhibited the same electrophoretic mobility as native microsomal enzyme, and immunoquantitation showed that this isoform represents approximately 0.5% of human liver microsomal protein. Therefore, FMO3 is antitatively

a major human liver monooxygenase. LC/electrospray-mass spectrometry analysis of purified FMO3 identified >70% of the tryptic peptides, including fragments containing motifs for N-linked glycosylation and O-linked glycosylation. Although insect cells have the capacity for glycan modification, MS analysis of the tryptic peptides demonstrated that these sites were not modified in the purified, recombinant enzyme. Edman degradation of the recombinant product revealed that posttranslational modification of human FMO3 by insect cells was limited to cleavage at the N-terminal methionine, a process seen in vivo with animal orthologs of FMO3. These studies demonstrate the suitability of this eukaryotic system for heterologous expression of human FMOs and future detailed analysis of their substrate specificities.

L3 ANSWER 5 OF 6 MEDLINE on STN

AB Polypeptides synthesized in the cytoplasm of eukaryotes are generally initiated with methionine, but N-terminal methionine is absent from most mature proteins. Many proteins are also N alpha-acetylated. The removal of N-terminal methionine and N alpha-acetylation are catalyzed by two enzymes during translation. The substrate preferences of the methionine aminopeptidase (EC 3.4.11.x) and N alpha-acetyltransferase (EC 2.3.1.x) have been partially inferred from the distribution of amino-terminal residues and/or mutations found for appropriate mature proteins, but with some contradictions. In this study, a synthetic gene corresponding to the mature amino acid sequence of the plant protein thaumatin, expressed in yeast as a nonexported protein, i.e., lacking a signal peptide, has been used to delineate the specificities of these enzymes with respect to the penultimate amino acid. Site-directed mutagenesis, employing synthetic oligonucleotides, was utilized to construct genes encoding each of the 20 amino acids following the initiation methionine codon, and each protein derivative was isolated and characterized with respect to its amino-terminal structure. All four possible N-terminal variants--those with and without methionine and those with and without N alpha-acetylation--were obtained. These results define the specificity of these enzymes in situ and suggest that the nature of the penultimate amino-terminal residue is the major determinant of their selectivity.

L3 ANSWER 6 OF 6 MEDLINE on STN

AB N-terminal methionine removal has been analyzed statistically in a large sample of prokaryotic and eukaryotic cytosolic proteins in an attempt to uncover common sequence determinants. We find that the residue next to the initiator Met is the most important determinant of N-terminal processing: Lys, Arg, Leu and (in prokaryotes) Phe and Ile protect the initiator Met from being removed when next to it in the sequence; Ala, Gly, Pro, Ser, Thr and (in eukaryotes) Val in this position cause its removal.

Subsequent acetylation is confirmed to be strongly biased towards Ala,

and Ser residues; when Met is acetylated, Asp is the predominant

penultimate residue in eukaryotes. Also, we find major differences in the relative abundance of the various residues next to the initiator Met between prokaryotes and eukaryotes: prokaryotic proteins are much more biased towards Lys as the Met-protecting residue, and towards Ala when met is to be removed, than eukaryotic ones. Finally, we show that our results can explain a part of the mRNA 'consensus sequence' found around eukaryotic initiator AUG codons.

=> d his

1.3

(FILE 'HOME' ENTERED AT 14:52:19 ON 24 AUG 2004)

FILE 'MEDLINE' ENTERED AT 14:52:38 ON 24 AUG 2004

L1 294 S N-TERMINAL METHIONINE

L2 50 S L1 AND PROCESSING

6 S L2 AND (EUCARY? OR EUKARY?)

=> s 12 and review 370603 REVIEW

0 L2 AND REVIEW

=> s 11 and review 370603 REVIEW

L5 1 L1 AND REVIEW

=> d

L5 ANSWER 1 OF 1 MEDLINE on STN

AN 95136886 MEDLINE

DN PubMed ID: 7530630

TI Filgrastim. A review of its pharmacological properties and therapeutic efficacy in neutropenia.

AU Frampton J E; Lee C R; Faulds D

CS Adis International Ltd, Auckland, New Zealand.

SO Drugs, (1994 Nov) 48 (5) 731-60. Ref: 143 Journal code: 7600076. ISSN: 0012-6667.

CY New Zealand

DT Journal; Article; (JOURNAL ARTICLE) General Review; (REVIEW) (REVIEW, ACADEMIC)

LA English

FS Priority Journals

EM 199503

ED Entered STN: 19950314

Last Updated on STN: 19960129 Entered Medline: 19950302

=> s 12 not 13

L6 44 L2 NOT L3

=> d 1-44

L6 ANSWER 1 OF 44 MEDLINE on STN

AN 2003554943 MEDLINE

DN PubMed ID: 14625590

TI Recognition and processing of the origin of transfer DNA by conjugative relaxase TrwC.

CM Erratum in: Nat Struct Biol. 2004 Jan;11(1):102

AU Guasch Alicia; Lucas Maria; Moncalian Gabriel; Cabezas Matilde; Perez-Luque Rosa; Gomis-Ruth F Xavier; de la Cruz Fernando; Coll Miquel

CS Institut de Biologia Molecular de Barcelona, CSIC, Jordi Girona, 18-26, 08034 Barcelona, Spain.

SO Nature structural biology, (2003 Dec) 10 (12) 1002-10.
Journal code: 9421566. ISSN: 1072-8368.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS PDB-10MH; PDB-10SB; PDB-1QXO

EM 200402

ED Entered STN: 20031125 Last Updated on STN: 20040203 Entered Medline: 20040202

L6 ANSWER 2 OF 44 MEDLINE on STN

AN 2002388077 MEDLINE

DN PubMed ID: 11994292

TI Methionine aminopeptidase 2 is a new target for the metastasis-associated protein, S100A4.

AU Endo Hideya; Takenaga Keizo; Kanno Takayuki; Satoh Hitoshi; Mori Shigeo

CS Division of Pathology, Department of Cancer Biology, The Institute of Medical Science, The University of Tokyo, 4-6-1 Shirokanedai, Minato-

u, Tokyo 108-8639, Japan.. endoh@ims.u-tokyo.ac.jp

SO Journal of biological chemistry, (2002 Jul 19) 277 (29) 26396-402. Journal code: 2985121R. ISSN: 0021-9258.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-AF434712

EM 200209

ED Entered STN: 20020725

Last Updated on STN: 20030105 Entered Medline: 20020906

L6 ANSWER 3 OF 44 MEDLINE on STN

AN 2002106673 MEDLINE

DN PubMed ID: 11811952

TI The specificity in vivo of two distinct methionine aminopeptidases in Saccharomyces cerevisiae.

CM Erratum in: Arch Biochem Biophys. 2003 Sep 1;417(1):128

AU Chen Shaoping; Vetro Joseph A; Chang Yie-Hwa

CS Edward A. Doisy Department of Biochemistry and Molecular Biology,

St.

Louis University School of Medicine, 1402 S. Grand Boulevard, St. Louis, Missouri 63104, USA.

SO Archives of biochemistry and biophysics, (2002 Feb 1) 398 (1) 87-93. Journal code: 0372430. ISSN: 0003-9861.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200202

ED Entered STN: 20020213

Last Updated on STN: 20020216 Entered Medline: 20020215

L6 ANSWER 4 OF 44 MEDLINE on STN

AN 2002065938 MEDLINE

DN PubMed ID: 11793218

TI Serotype classification and characterisation of the rotavirus SA11 VP6 protein using mass spectrometry and two-dimensional gel electrophoresis.

AU Emslie K R; Molloy M P; Barardi C R; Jardine D; Wilkins M R;

Bellamy A R;

Williams K L

CS Macquarie University Centre for Analytical Biotechnology, School of Biological Sciences, Macquarie University, Sydney, NSW 2109, Australia.

SO Functional & integrative genomics, (2000 May) 1 (1) 12-24. Journal code: 100939343. ISSN: 1438-793X.

CY Germany: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200203

ED Entered STN: 20020125 Last Updated on STN: 20020324

Entered Medline: 20020322

L6 ANSWER 5 OF 44 MEDLINE on STN

AN 2001694006 MEDLINE

DN PubMed ID: 11738381

TI Organellar peptide deformylases: universality of the Nterminal methionine cleavage mechanism.

AU Giglione C: Meinnel T

CS Institut des Sciences du Vegetal, UPR2355, Centre National de la

Recherche

Scientifique, Batiment 23, 1 avenue de la Terrasse, F-91198 Gif-sur-Yvette Cedex, France.. meinnel@isv.cnrs-gif.fr

SO Trends in plant science, (2001 Dec) 6 (12) 566-72. Ref: 50 Journal code: 9890299. ISSN: 1360-1385.

CY England: United Kingdom

DT Journal: Article: (JOURNAL ARTICLE)

General Review; (REVIEW) (REVIEW, TUTORIAL)

LA English

FS Priority Journals

EM 200202

ED Entered STN: 20011217 Last Updated on STN: 20020206 Entered Medline: 20020205

L6 ANSWER 6 OF 44 MEDLINE on STN

AN 2001677430 MEDLINE

DN PubMed ID: 11722174

TI Recombinant wheat antifungal PR4 proteins expressed in Escherichia

AU Caruso C; Bertini L; Tucci M; Caporale C; Nobile M; Leonardi L; Buonocore

CS Dipartimento di Agrobiologia e Agrochimica, Universita della Tusica, Italy.. caruso@unitus.it

SO Protein expression and purification, (2001 Dec) 23 (3) 380-8. Journal code: 9101496. ISSN: 1046-5928.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200204

ED Entered STN: 20011128 Last Updated on STN: 20020501 Entered Medline: 20020430

L6 ANSWER 7 OF 44 MEDLINE on STN

AN 2000168907 MEDLINE

DN PubMed ID: 10706390

TI Post-translational modification of alphaB-crystallin of normal human

AU Kamei A; Hamaguchi T; Matsuura N; Iwase H; Masuda K

CS Department of Biochemistry, Faculty of Pharmaceutical Sciences, Meijo University, Nagoya, Japan.

SO Biological & pharmaceutical bulletin, (2000 Feb) 23 (2) 226-30. Journal code: 9311984. ISSN: 0918-6158.

CY Japan

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

FM 200004

ED Entered STN: 20000421 Last Updated on STN: 20000421 Entered Medline: 20000413

L6 ANSWER 8 OF 44 MEDLINE on STN

AN 1999454083 MEDLINE

DN PubMed ID: 10526959

TI Related alphaN- and epsilonN-methyltransferases methylate the large and small subunits of Rubisco.

AU Ying Z; Mulligan R M; Janney N; Royer M; Houtz R L

CS Department of Horticulture & Landscape Architecture, University of Kentucky, Lexington 40546-0091, USA.

SO Acta biologica Hungarica, (1998) 49 (2-4) 173-84. Journal code: 8404358. ISSN: 0236-5383.

CY Hungary

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199911

ED Entered STN: 20000111 Last Updated on STN: 20000111 Entered Medline: 19991124

L6 ANSWER 9 OF 44 MEDLINE on STN

AN 1999306859 MEDLINE

DN PubMed ID: 10377249

TI Chemical cleavage of the overexpressed mitochondrial F1beta precursor

CNBr: a new strategy to construct an import-competent preprotein.

AU Pavlov P F; Moberg P; Zhang X P; Glaser E

CS Department of Biochemistry, Arrhenius Laboratories for Natural Sciences.

Stockholm University, 10691 Stockholm, Sweden.

SO Biochemical journal, (1999 Jul 1) 341 (Pt 1) 95-103. Journal code: 2984726R. ISSN: 0264-6021.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199909

ED Entered STN: 19990925 Last Updated on STN: 20000303

Entered Medline: 19990903

L6 ANSWER 10 OF 44 MEDLINE on STN

AN 1999217172 MEDLINE

DN PubMed ID: 10201115

TI N-terminal methionine in recombinant proteins expressed in two different Escherichia coli strains.

AU Vassileva-Atanassova A; Mironova R; Nacheva G; Ivanov I

CS Institute of Molecular Biology, Bulgarian Academy of Science, Sofia, Bulgaria.. anel@obzor.bio21.bas.bg

SO Journal of biotechnology, (1999 Mar 26) 69 (1) 63-7. Journal code: 8411927. ISSN: 0168-1656.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199906

ED Entered STN: 19990712 Last Updated on STN: 19990712 Entered Medline: 19990623

L6 ANSWER 11 OF 44 MEDLINE on STN

AN 1999196679 MEDLINE

DN PubMed ID: 10094780

Tl Observation of Escherichia coli ribosomal proteins and their posttranslational modifications by mass spectrometry.

AU Amold R J; Reilly J P

CS Department of Chemistry, Indiana University, Bloomington, Indiana 47405,

SO Analytical biochemistry, (1999 Apr 10) 269 (1) 105-12. Journal code: 0370535. ISSN: 0003-2697.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199905

ED Entered STN: 19990614

Last Updated on STN: 19990614 Entered Medline: 19990528

L6 ANSWER 12 OF 44 MEDLINE on STN

AN 1999160482 MEDLINE

DN PubMed ID: 10049672

TI Purification and characterization of a plant antimicrobial peptide expressed in Escherichia coli.

AU Harrison S J; McManus A M; Marcus J P; Goulter K C; Green J L; Nielsen K

J; Craik D J; Maclean D J; Manners J M

CS Cooperative Research Centre for Tropical Plant Pathology, University of Queensland, Brisbane, 4072, Australia.

SO Protein expression and purification, (1999 Mar) 15 (2) 171-7. Journal code: 9101496. ISSN: 1046-5928.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199905

ED Entered STN: 19990525 Last Updated on STN: 19990525

Entered Medline: 19990511

L6 ANSWER 13 OF 44 MEDLINE on STN

AN 1998324858 MEDLINE

DN PubMed ID: 9657867

TI Characterization of proteins utilized in the desulfurization of petroleum products by matrix-assisted laser desorption ionization time-of-flight mass spectrometry.

AU Wolf B P; Sumner L W; Shields S J; Nielsen K; Gray K A; Russell D H

CS Department of Chemistry, Texas A&M University, College Station,

77842, USA.. bwolf@chemvx.tamu.edu

SO Analytical biochemistry, (1998 Jul 1) 260 (2) 117-27. Journal code: 0370535. ISSN: 0003-2697.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199808

ED Entered STN: 19980903

Last Updated on STN: 20000303 Entered Medline: 19980825

L6 ANSWER 14 OF 44 MEDLINE on STN

AN 97447818 MEDLINE

DN PubMed ID: 9303558

TI Electrospray ionization mass spectrometry analysis of the apo- and metal-substituted forms of the Fur protein.

AU Michaud-Soret I; Adrait A; Jaquinod M; Forest E; Touati D; Latour J M CS Departement de Recherche Fondamentale sur la Matiere Condensee,

(Unite de

Recherche Associee au CNRS No. 1194), CEA-Grenoble, France.. michaud@drfmc.ceng.cea.fr

SO FEBS letters, (1997 Aug 25) 413 (3) 473-6. Journal code: 0155157. ISSN: 0014-5793.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199710

ED Entered STN: 19971024 Last Updated on STN: 19971024 Entered Medline: 19971010

L6 ANSWER 15 OF 44 MEDLINE on STN

AN 97221581 MEDLINE

DN PubMed ID: 9068627

TI Isolation and characterization of a molecular chaperone, gp57A, of bacteriophage T4.

AU Matsui T; Griniuviene B; Goldberg E; Tsugita A; Tanaka N; Arisaka F

CS Department of Life Science, Faculty of Bioscience and Biotechnology,

Institute of Technology, Yokohama, Japan.

SO Journal of bacteriology, (1997 Mar) 179 (6) 1846-51.

Journal code: 2985120R. ISSN: 0021-9193.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199704

ED Entered STN: 19970422

Last Updated on STN: 19970422 Entered Medline: 19970408

L6 ANSWER 16 OF 44 MEDLINE on STN

AN 96374489 MEDLINE

DN PubMed ID: 8780780

TI Capsid targeting sequence targets foreign proteins into bacteriophage T4 and permits proteolytic processing.

AU Mullaney J M; Black L W

CS Department of Biochemistry and Molecular Biology University of Maryland

School of Medicine, Baltimore 21201-1596, USA.

NC A111676

SO Journal of molecular biology, (1996 Aug 23) 261 (3) 372-85. Journal code: 2985088R. ISSN: 0022-2836.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199610

ED Entered STN: 19961106

Last Updated on STN: 19970203 Entered Medline: 19961024

L6 ANSWER 17 OF 44 MEDLINE on STN

AN 96109265 MEDLINE

DN PubMed ID: 8618900

TI Amino-terminal protein processing in Saccharomyces cerevisiae is an essential function that requires two distinct methionine aminopeptidases.

AU Li X; Chang Y H

CS Edward A. Doisy Department of Biochemistry and Molecular Biology,

Louis University School of Medicine, MO 63104, USA.

SO Proceedings of the National Academy of Sciences of the United States of America, (1995 Dec 19) 92 (26) 12357-61. Journal code: 7505876. ISSN: 0027-8424.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-U17437

EM 199606

ED Entered STN: 19960620

Last Updated on STN: 20000303

Entered Medline: 19960607

L6 ANSWER 18 OF 44 MEDLINE on STN

AN 96106931 MEDLINE

DN PubMed ID: 8535149

TI Cytoplasmic and periplasmic production of human placental glutathione transferase in Escherichia coli.

AU Battistoni A; Mazzetti A P; Petruzzelli R; Muramatsu M; Federici G; Ricci

G; Lo Bello M

CS Department of Biology, University of Rome Tor Vergata, Italy.

SO Protein expression and purification, (1995 Oct) 6 (5) 579-87.
Journal code: 9101496. ISSN: 1046-5928.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199602

ED Entered STN: 19960221

Last Updated on STN: 19980206 Entered Medline: 19960208

L6 ANSWER 19 OF 44 MEDLINE on STN

AN 96070771 MEDLINE

DN PubMed ID: 7592921

Tl Determination of in vivo phosphorylation sites in protein kinase C.

AU Tsutakawa S E; Medzihradszky K F; Flint A J; Burlingame A L; Koshland D E

Jr

CS Department of Biochemistry and Molecular Biology, University of California

Berkeley 94720-3206, USA.

NC DK09765 (NIDDK)

ES04705 (NIEHS)

RR01614 (NCRR)

SO Journal of biological chemistry, (1995 Nov 10) 270 (45) 26807-12. Journal code: 2985121R. ISSN: 0021-9258.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199512

ED Entered STN: 19960124

Last Updated on STN: 19960124 Entered Medline: 19951226

L6 ANSWER 20 OF 44 MEDLINE on STN

AN 96062246 MEDLINE

DN PubMed ID: 7592439

TI Organization and transcriptional analysis of the Listeria phage A511 late gene region comprising the major capsid and tail sheath protein genes cps and tsh.

AU Loessner M J; Scherer S

CS Institut fur Mikrobiologie, Forschungszentrum fur Milch und Lebensmittel

Weihenstephan, Technische Universitat Munchen, Freising, Germany.

SO Journal of bacteriology, (1995 Nov) 177 (22) 6601-9. Journal code: 2985120R. ISSN: 0021-9193.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-X91069

EM 199512

ED Entered STN: 19960124 Last Updated on STN: 19960124 Entered Medline: 19951219

L6 ANSWER 21 OF 44 MEDLINE on STN

AN 95391659 MEDLINE

DN PubMed ID: 7662663

TI Human uridine monophosphate synthase: baculovirus expression, immunoaffinity column purification and characterization of the acetylated amino terminus.

AU Han B D; Livingstone L R; Pasek D A; Yablonski M J; Jones M E CS Department of Biochemistry and Biophysics, University of North

Carolina at Chapel Hill 27599-7260, USA.

NC GM 34539 (NIGMS)

SO Biochemistry, (1995 Aug 29) 34 (34) 10835-43. Journal code: 0370623. ISSN: 0006-2960.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199510

ED Entered STN: 19951020

Last Updated on STN: 19951020

Entered Medline: 19951006

L6 ANSWER 22 OF 44 MEDLINE on STN

AN 95329940 MEDLINE

DN PubMed ID: 7606168

TI Overproduction and purification of the Mycoplasma capricolum phosphocarrier protein, HPr, of the phosphoenolpyruvate: sugar phosphotransferase system.

AU Zhu P P; Lecchi P; Pannell L; Jaffe H; Peterkofsky A

CS National Institutes of Health, Bethesda, Maryland 20852, USA.

SO Protein expression and purification, (1995 Apr.) 6 (2) 189-95. Journal code: 9101496. ISSN: 1046-5928.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199508

ED Entered STN: 19950828

Last Updated on STN: 19950828

Entered Medline: 19950816

L6 ANSWER 23 OF 44 MEDLINE on STN

AN 95014044 MEDLINE

DN PubMed ID: 7928970

TI Characterization of lipoprotein EnvA in Chlamydia psittaci 6BC.

AU Everett K D; Desiderio D M; Hatch T P

CS Department of Microbiology and Immunology, University of Tennessee, Memphis 38163.

NC All 9570 (NIAID)

SO Journal of bacteriology, (1994 Oct) 176 (19) 6082-7.
Journal code: 2985120R. ISSN: 0021-9193.

CY United States.

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199410

ED Entered STN: 19941222 Last Updated on STN: 20000303

Entered Medline: 19941028

L6 ANSWER 24 OF 44 MEDLINE on STN

AN 94316190 MEDLINE

DN PubMed ID: 8041359

TI The 42.5 kDa subunit of the NADH: ubiquinone oxidoreductase (complex I) in

higher plants is encoded by the mitochondrial nad7 gene.

AU Gabler L; Herz U; Liddell A; Leaver C J; Schroder W; Brennicke A; Grohmann

L

CS Institut für Genbiologische Forschung Berlin, Germany.

SO Molecular & general genetics: MGG, (1994 Jul 8) 244 (1) 33-40. Journal code: 0125036. ISSN: 0026-8925.

CY GERMANY: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-X75579

EM 199408

ED Entered STN: 19940905

Last Updated on STN: 19960129

Entered Medline: 19940825

L6 ANSWER 25 OF 44 MEDLINE on STN

AN 94153337 MEDLINE

DN PubMed ID: 8110201

TI Purification and characterization of a cadmium-induced metallothionein from the shore crab Carcinus maenas (L.).

AU Pedersen K L; Pedersen S N; Hojrup P; Andersen J S; Roepstorff P; Knudsen

J; Depledge M H

CS Institute of Biology, University of Odense, Denmark.

SO Biochemical journal, (1994 Feb 1) 297 (Pt 3) 609-14. Journal code: 2984726R. ISSN: 0264-6021.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199403 ED Entered STN: 19940330

Last Updated on STN: 19970203

Entered Medline: 19940323

L6 ANSWER 26 OF 44 MEDLINE on STN

AN 94029003 MEDLINE

DN PubMed ID: 8215435

TI Covalent dimerization of recombinant human interferon-gamma.

AU Lauren S L; Arakawa T; Stoney K; Rohde M F

CS Amgen Inc., Amgen Center, Thousand Oaks, California 91320-1789.

SO Archives of biochemistry and biophysics, (1993 Nov 1) 306 (2) 350-3. Journal code: 0372430. ISSN: 0003-9861.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199311

ED Entered STN: 19940117 Last Updated on STN: 19940117 Entered Medline: 19931119

L6 ANSWER 27 OF 44 MEDLINE on STN

AN 94024866 MEDLINE

DN PubMed ID: 8211973

TI The biosynthesis of a cytotoxic protein, alpha-sarcin, in a mold Aspergillus giganteus. I. Synthesis of prepro- and pro-alpha-sarcin in vitro.

AU Endo Y; Oka T; Tsurugi K; Natori Y

CS Department of Biochemistry, Yamanashi Medical College, Japan.

SO Tokushima journal of experimental medicine, (1993 Jun) 40 (1-2) 1-6. Journal code: 0417356. ISSN: 0040-8875.

CY Japan

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199311

ED Entered STN: 19940117 Last Updated on STN: 19940117 Entered Medline: 19931119

L6 ANSWER 28 OF 44 MEDLINE on STN

AN 94010208 MEDLINE

DN PubMed ID: 8405929

TI Amino-terminal methionine processing of the protein HPr in Streptococcus salivarius grown in continuous culture.

AU Vadeboncoeur C; Brochu D; Trahan L; Fradette J; Gingras S

CS Department of Biochemistry (Sciences) and Faculty of Dental Medicine, Universite Laval, Quebec, Canada.

SO FEMS microbiology letters, (1993 Aug 1) 111 (2-3) 197-202. Journal code: 7705721. ISSN: 0378-1097.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199310

ED Entered STN: 19940117 Last Updated on STN: 20000303 Entered Medline: 19931028

L6 ANSWER 29 OF 44 MEDLINE on STN

AN 93263926 MEDLINE

DN PubMed ID: 8494564

TI [Preparation and bacterial expression of a mutant gene for human lymphotoxin].

Poluchenie i bakteral'naia ekspressiia mutantnogo gena limfotoksina cheloveka.

AU Korobko V G; Davydov I V; Dobrynin V N; Pustoshilova N M; Lebedev LR:

Gileva I P; Petrenko V A

SO Bioorganicheskaia khimiia, (1993 Apr) 19 (4) 414-9. Journal code: 7804941. ISSN: 0132-3423.

CY RUSSIA: Russian Federation

DT Journal; Article; (JOURNAL ARTICLE)

LA Russian

FS Priority Journals

EM 199306

ED Entered STN: 19930625

Last Updated on STN: 19930625 Entered Medline: 19930615

L6 ANSWER 30 OF 44 MEDLINE on STN

AN 93015759 MEDLINE

DN PubMed ID: 1400245

TI Cloning, nucleotide sequence, expression, and chromosomal location of

the gene encoding L-(+)-lactate dehydrogenase, from Lactococcus lactis.

AU Llanos R M; Hillier A J; Davidson B E

CS Russell Grimwade School of Biochemistry, University of Melbourne, Parkville, Victoria, Australia.

SO Journal of bacteriology, (1992 Nov) 174 (21) 6956-64. Journal code: 2985120R. ISSN: 0021-9193.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-L01134; GENBANK-L01135; GENBANK-L01136; GENBANK-L01137;

GENBANK-L01138; GENBANK-L01139; GENBANK-L01140;

GENBANK-L01141;

GENBANK-L07920; GENBANK-M95919

EM 199211

ED Entered STN: 19930122

Last Updated on STN: 19930122

Entered Medline: 19921125

L6 ANSWER 31 OF 44 MEDLINE on STN

AN 92393989 MEDLINE

DN PubMed ID: 1521466

TI Oxidation of the N-terminal methionine of lens alpha-A crystallin.

AU Takemoto L; Horwitz J; Emmons T

CS Division of Biology, Kansas State University, Manhattan 66506.

NC RR01614 (NCRR)

SO Current eye research, (1992 Jul) 11 (7) 651-5. Journal code: 8104312. ISSN: 0271-3683.

(Investigators: Spooner B S, KS St U, Manhattan)

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals, Space Life Sciences

EM 199210

ED Entered STN: 19921023

Last Updated on STN: 20021210

Entered Medline: 19921015

L6 ANSWER 32 OF 44 MEDLINE on STN

AN 92231574 MEDLINE

DN PubMed ID: 1567207

TI Selenium-dependent glutathione peroxidases from ovine and bovine erythrocytes occur as longer chain forms than previously recognized.

AU Gettins P; Dyal D; Crews B

CS Department of Biochemistry, Vanderbilt University School of Medicine. Nashville, Tennessee 37232-0146.

NC GM-39509 (NIGMS) HD-20583 (NÎCHD) HD-20922 (NICHD)

SO Archives of biochemistry and biophysics, (1992 May 1) 294 (2) 511-8. Journal code: 0372430. ISSN: 0003-9861.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199205

ED Entered STN: 19920607 Last Updated on STN: 20000303 Entered Medline: 19920515

L6 ANSWER 33 OF 44 MEDLINE on STN

AN 91222506 MEDLINE

DN PubMed ID: 1367082

TI Methods for removing N-terminal methionine from recombinant proteins.

AU Ben-Bassat A

CS Cetus Corporation Emeryville, California.

SO Bioprocess technology, (1991) 12 147-59. Ref: 40 Journal code: 8601086. ISSN: 0888-7470.

CY United States

DT Journal; Article; (JOURNAL ARTICLE) General Review; (REVIEW) (REVIEW, ACADEMIC)

LA English

FS Biotechnology

EM 199106

ED Entered STN: 19950809 Last Updated on STN: 20000303

Entered Medline: 19910612

L6 ANSWER 34 OF 44 MEDLINE on STN

AN 91170964 MEDLINE

DN PubMed ID: 1848606

TI Myristoylation of foot-and-mouth disease virus capsid protein precursors is independent of other viral proteins and occurs in both mammalian and

AU Belsham G J; Abrams C C; King A M; Roosien J; Vlak J M

CS AFRC Institute for Animal Health, Pirbright Laboratory, Woking, Surrey.

U.K.

SO Journal of general virology, (1991 Mar) 72 (Pt 3) 747-51. Journal code: 0077340. ISSN: 0022-1317.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199104

ED Entered STN: 19910512 Last Updated on STN: 19970203 Entered Medline: 19910422

L6 ANSWER 35 OF 44 MEDLINE on STN

AN 90306329 MEDLINE

DN PubMed ID: 2194835

TI In vivo processing of N-terminal

methionine in E. coli.

AU Dalboge H; Bayne S; Pedersen J

CS Novo Nordisk A/S, Bagsvaerd, Denmark.

SO FEBS letters, (1990 Jun 18) 266 (1-2) 1-3. Journal code: 0155157. ISSN: 0014-5793.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199008

ED Entered STN: 19900921 Last Updated on STN: 19900921 Entered Medline: 19900814

L6 ANSWER 36 OF 44 MEDLINE on STN

AN 90076955 MEDLINE

DN PubMed ID: 2556328

TI Expression and activity of a gene encoding rat cytochrome c in the yeast Saccharomyces cerevisiae.

AU Clements J M; O'Connell L I; Tsunasawa S; Sherman F

CS Department of Biochemistry, University of Rochester School of Medicine and

Dentistry, NY 14642. NC RO1 GM12702 (NIGMS)

SO Gene, (1989 Nov 15) 83 (1) 1-14.

Journal code: 7706761. ISSN: 0378-1119.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199001

ED Entered STN: 19900328

Last Updated on STN: 19970203

Entered Medline: 19900116

L6 ANSWER 37 OF 44 MEDLINE on STN

AN 90046773 MEDLINE

DN PubMed ID: 2682640

TI Extent of N-terminal methionine excision from Escherichia coli proteins is governed by the side-chain length of the penultimate amino acid.

AU Hirel P H; Schmitter M J; Dessen P; Fayat G; Blanquet S

CS Laboratoire de Biochimie, Unite Associee 240 Centre National de la Recherche Scientifique, Ecole Polytechnique, Palaiseu, France.

SO Proceedings of the National Academy of Sciences of the United States of America, (1989 Nov) 86 (21) 8247-51. Journal code: 7505876. ISSN: 0027-8424.

CY United States

DT Journal, Article, (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198912

ED Entered STN: 19900328

Last Updated on STN: 20000303

Entered Medline: 19891208

L6 ANSWER 38 OF 44 MEDLINE on STN

AN 88284374 MEDLINE

DN PubMed ID: 2456256

TI Alteration of amino-terminal codons of human granulocyte-colonystimulating factor increases expression levels and allows efficient processing by methionine aminopeptidase in Escherichia coli.

AU Devlin P E; Drummond R J; Toy P; Mark D F; Watt K W; Devlin J J

CS Department of Molecular Biology, Cetus Corporation, Emeryville, CA 94608.

SO Gene, (1988 May 15) 65 (1) 13-22.

Journal code: 7706761. ISSN: 0378-1119.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-M20922

EM 198809

ED Entered STN: 19900308

Last Updated on STN: 20000303

Entered Medline: 19880907

L6 ANSWER 39 OF 44 MEDLINE on STN

AN 88243783 MEDLINE

DN PubMed ID: 3379061

TI Altered turnover of allelic variants of hypoxanthine phosphoribosyltransferase is associated with N-terminal amino acid sequence variation.

AU Johnson G G; Kronert W A; Bernstein S I; Chapman V M; Smith K D

CS Department of Biology, San Diego State University, California 92182.

NC GM-32443 (NIGMS)

GM-32471 (NIGMS)

GM-33160 (NIGMS)

SO Journal of biological chemistry, (1988 Jul 5) 263 (19) 9079-82. Journal code: 2985121R. ISSN: 0021-9258.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-M20011

EM 198807

ED Entered STN: 19900308 Last Updated on STN: 19970203 Entered Medline: 19880727

L6 ANSWER 40 OF 44 MEDLINE on STN

AN 88075150 MEDLINE

DN PubMed ID: 3688438

aprol A6

TI The state of the N-terminus of recombinant proteins: determination of N-terminal methionine (formylated, acetylated, or free).

AU Rose K; Savoy L A; Simona M G; Offord R E; Wingfield P T; Mattaliano R J;

Thatcher D R

CS Departement de Biochimie Medicale, CMU, Geneva, Switzerland.

SO Analytical biochemistry, (1987 Aug 15) 165 (1) 59-69. Journal code: 0370535. ISSN: 0003-2697.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198801

ED Entered STN: 19900305 Last Updated on STN: 19900305 Entered Medline: 19880113

L6 ANSWER 41 OF 44 MEDLINE on STN

AN 88007554 MEDLINE

DN PubMed ID: 3654619

TI Structure, position, and biosynthesis of the high mannose and the complex oligosaccharide side chains of the bean storage protein phaseolin.

AU Sturm A; Van Kuik J A; Vliegenthart J F; Chrispeels M J

CS Department of Biology, University of California, San Diego, La Jolla

SO Journal of biological chemistry, (1987 Oct 5) 262 (28) 13392-403. Journal code: 2985121R. ISSN: 0021-9258.

CY United States

Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198711

ED Entered STN: 19900305 Last Updated on STN: 19950404 Entered Medline: 19871109

L6 ANSWER 42 OF 44 MEDLINE on STN

AN 87204202 MEDLINE

DN PubMed ID: 3106976

TI N-terminal methionine-specific peptidase in Salmonella typhimurium.

AU Miller C G; Strauch K L; Kukral A M; Miller J L; Wingfield P T; Mazzei G

J; Werlen R C; Graber P; Movva N R

NC AI10333 (NIAID)

SO Proceedings of the National Academy of Sciences of the United States of America, (1987 May) 84 (9) 2718-22.

Journal code: 7505876. ISSN: 0027-8424.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198706

ED Entered STN: 19900303

Last Updated on STN: 20000303

Entered Medline: 19870609

L6 ANSWER 43 OF 44 MEDLINE on STN

AN 87191002 MEDLINE

DN PubMed ID: 2952523

TI N-terminal-methionylated interleukin-1 beta has reduced receptor-binding affinity.

CM Erratum in: FEBS Lett 1987 Aug 10;220(1):253

AU Wingfield P; Graber P; Movva N R; Gronenborn A M; Clore G M;

MacDonald H R

SO FEBS letters, (1987 May 4) 215 (1) 160-4. Journal code: 0155157. ISSN: 0014-5793.

CY Netherlands

DT Journal; Article; (JOURNAL ARTICLE)

English

FS Priority Journals

EM 198706

ED Entered STN: 19900303

Last Updated on STN: 19900303 Entered Medline: 19870615

L6 ANSWER 44 OF 44 MEDLINE on STN

AN 79213454 MEDLINE

DN PubMed ID: 572297

TI Nucleotide sequence coding for the N-terminal region of the matrix protein

influenza virus.

AU Both G W; Air G M

SO European journal of biochemistry / FEBS, (1979 May 15) 96 (2) 363-72. Journal code: 0107600. ISSN: 0014-2956.

CY GERMANY, WEST: Germany, Federal Republic of

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

OS GENBANK-M10642

EM 197909

ED Entered STN: 19900315 Last Updated on STN: 19970203

Entered Medline: 19790917

=> d 40 abs

L6 ANSWER 40 OF 44 MEDLINE on STN

AB The removal of N-terminal methionine from

proteins produced by recombinant DNA techniques is often far from quantitative. Furthermore, a proportion of the methionylated product may be N alpha-blocked and thus not easily accessible to conventional (Edman) techniques of protein characterization. In this paper, a method for overcoming the resulting analytical problems is described. The technique

is based on perdeuteroacetylation (performed only if unblocked methionine is to be determined), cleavage with cyanogen bromide, extraction of any acylhomoserine lactone into ethyl acetate, formation of a chemical derivative, and analysis by combined gas-liquid chromatography/mass spectrometry (GC/MS). The remaining cyanogen bromide fragments, soluble

in ethyl acetate, are available for further analysis by mass spectrometric or other methods if required. Using an acylhomoserine lactone labeled with a stable isotope as internal standard, the method is semiquantitative. It should be possible to develop a quantitative method if appropriate polypeptide standards are prepared. N-Terminal processing of eight recombinant-derived proteins is discussed.

=> d 33 abs

L6 ANSWER 33 OF 44 MEDLINE on STN